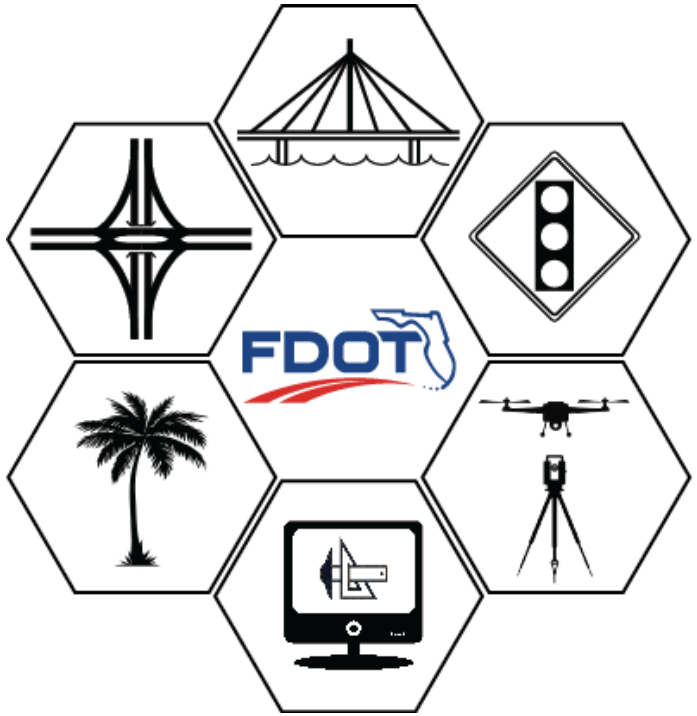


FDOT TRANSPORTATION SYMPOSIUM 2019

FDOT Traffic Design Tools (FDOT C3D & FDOT ORD)

Randy Roberts and Kandi Daffin

What will be Covered (Part 1)

Civil 3D Traffic Plan Updates

- Mast Arm Assemblies
- Pavement Marking Tool
- Place Block Group
- Multi-Line Tool
- FDOT Signs

What will be Covered (Part 2)

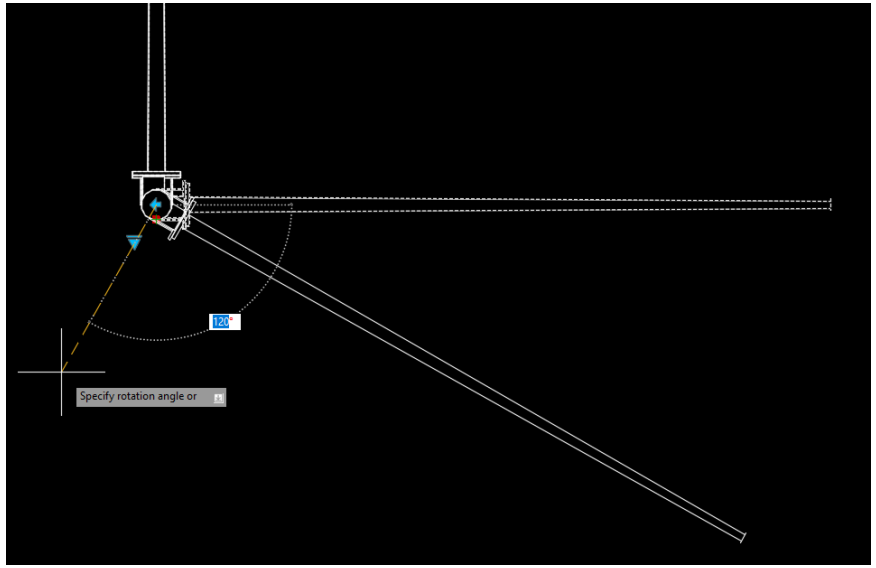
ORD Traffic Plan Updates

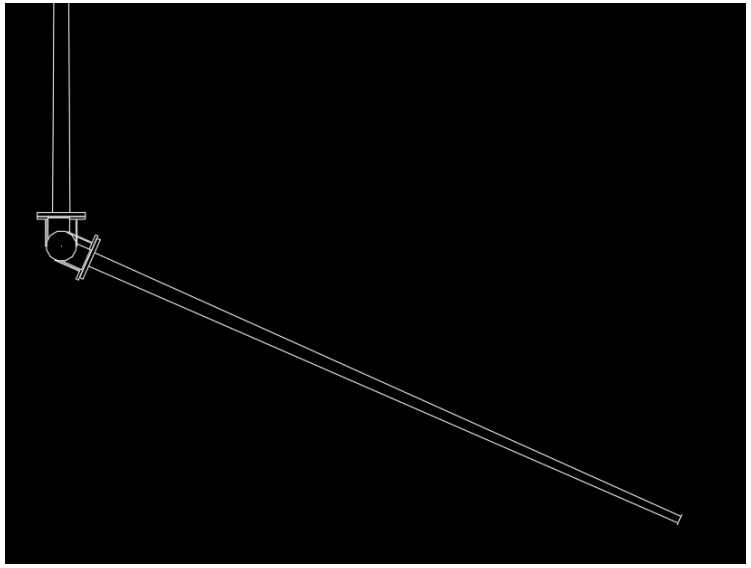
- FDOT Signs Demonstration and Overview
- Pavement Marking Tool & Place Cell Group Updates

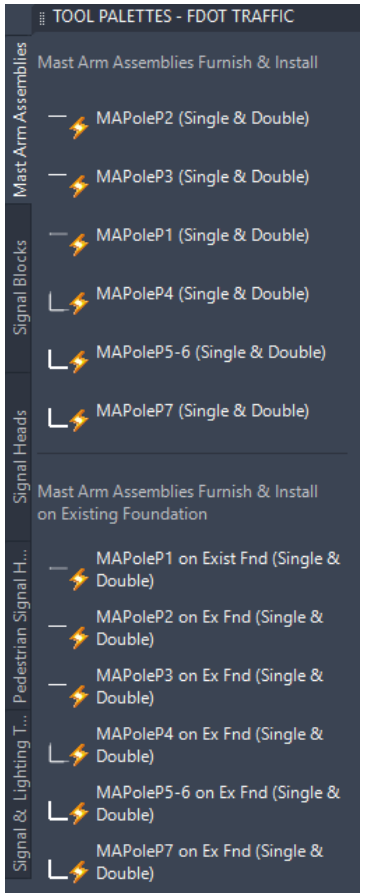
Part 1
Civil 3D

Mast Arm Assemblies

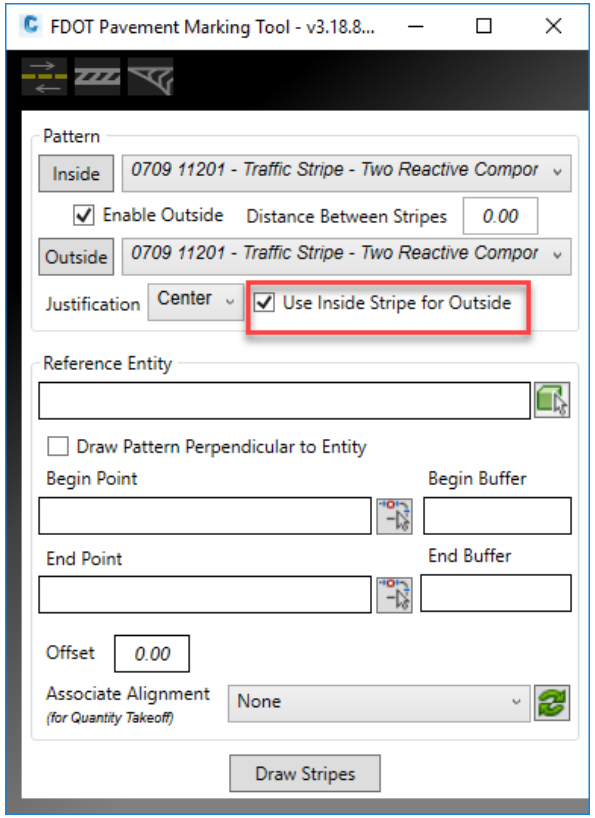
A Rotation parameter was added to all mast arm assemblies, which allows the designer to rotate an arm so that it isn't 90 degrees to the other one. An example is shown below.





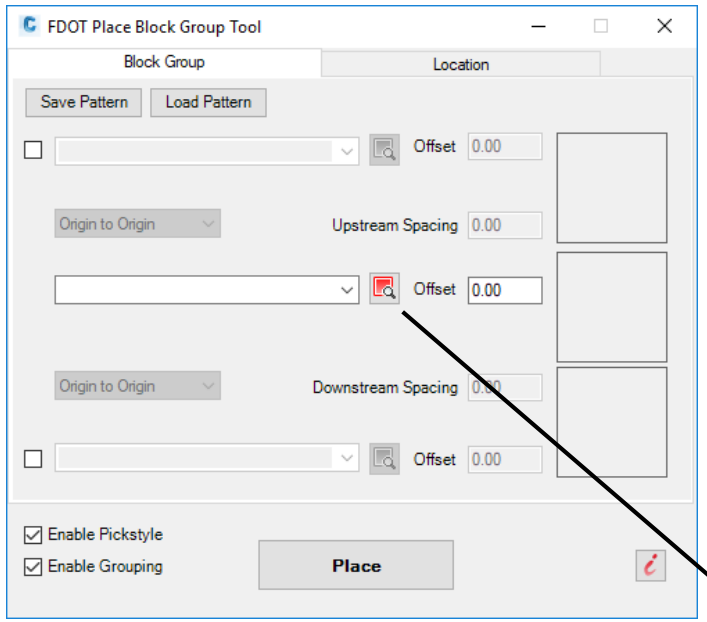


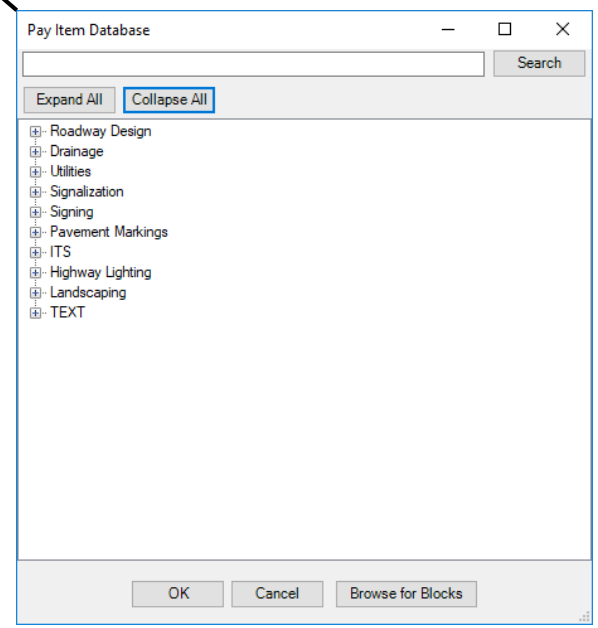
FDOT Pavement Marking Tool

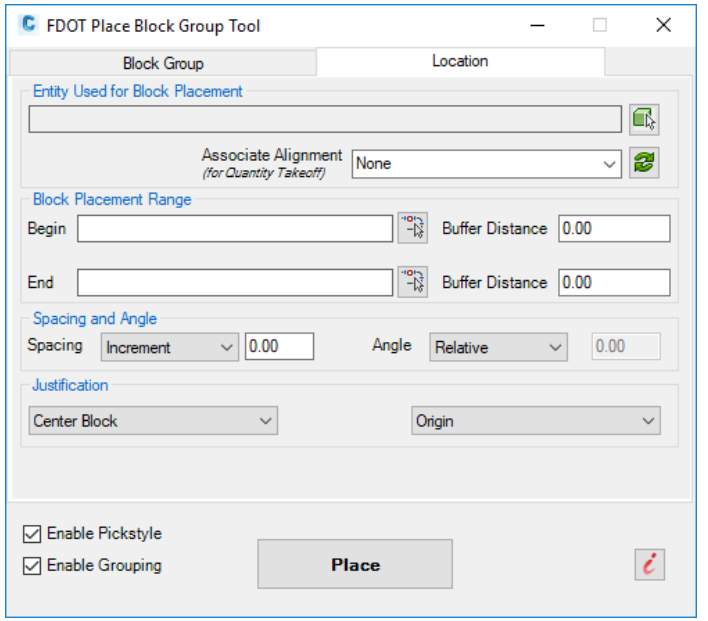


There is a new option in the pavement marking tool that allows the outside pattern to match the inside pattern. This saves time because before you had to browse for both patterns independently.

FDOT Place Block Group

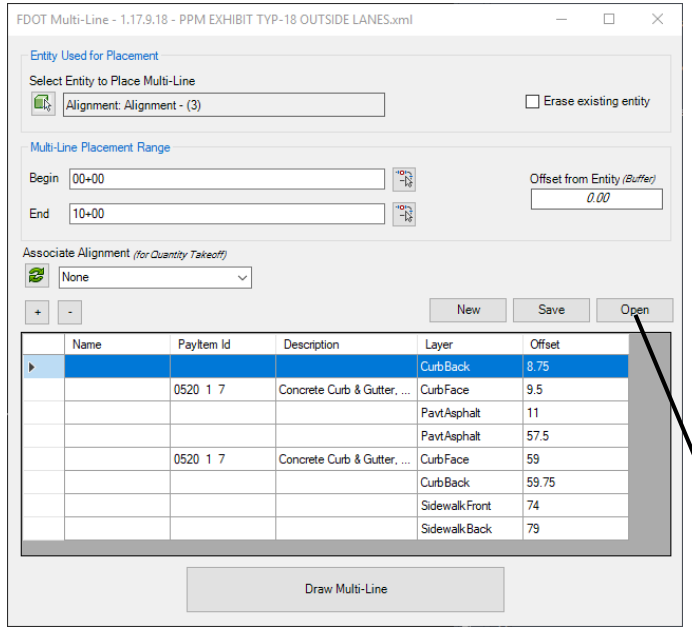




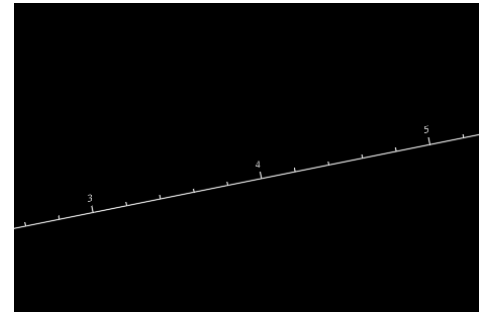


Place Block Group has several new options when you click on the red browse button. You have an option to expand or collapse all for the categories, along with a search option if you know the name or pay item number. You can also use the Browse for Blocks button located on the bottom to use your own blocks outside of the Pay Item database.

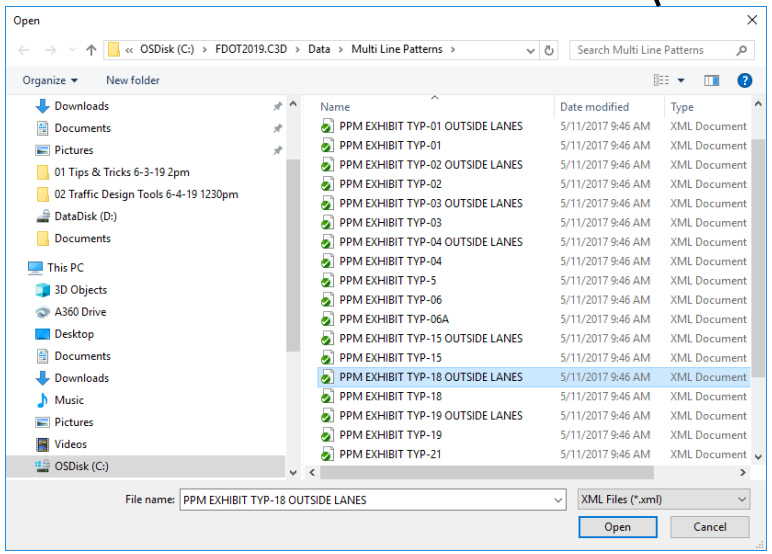
FDOT Multi-Line

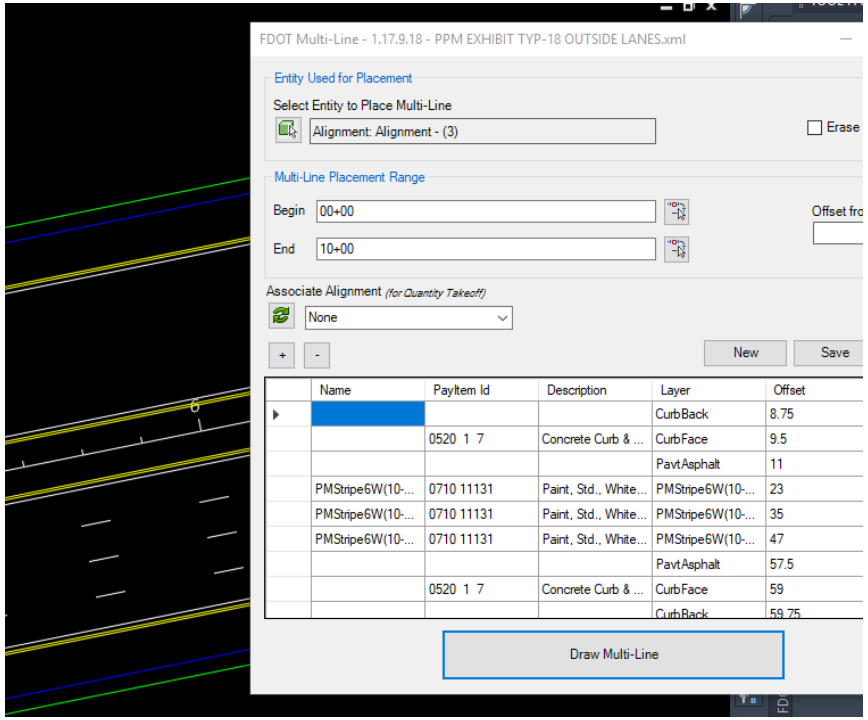


Nothing new to report on the FDOT Multi-Line app, but if you haven't been using it you are missing out on reducing your drawing time. The example shown below is a divided curbed highway. You have an option to just place the pattern as is or you can add additional patterns. The example shows I added 3 10-30 Skip patterns to one side.



Note that each subline will be placed on its Correct Layer and Pay Item id if applicable.

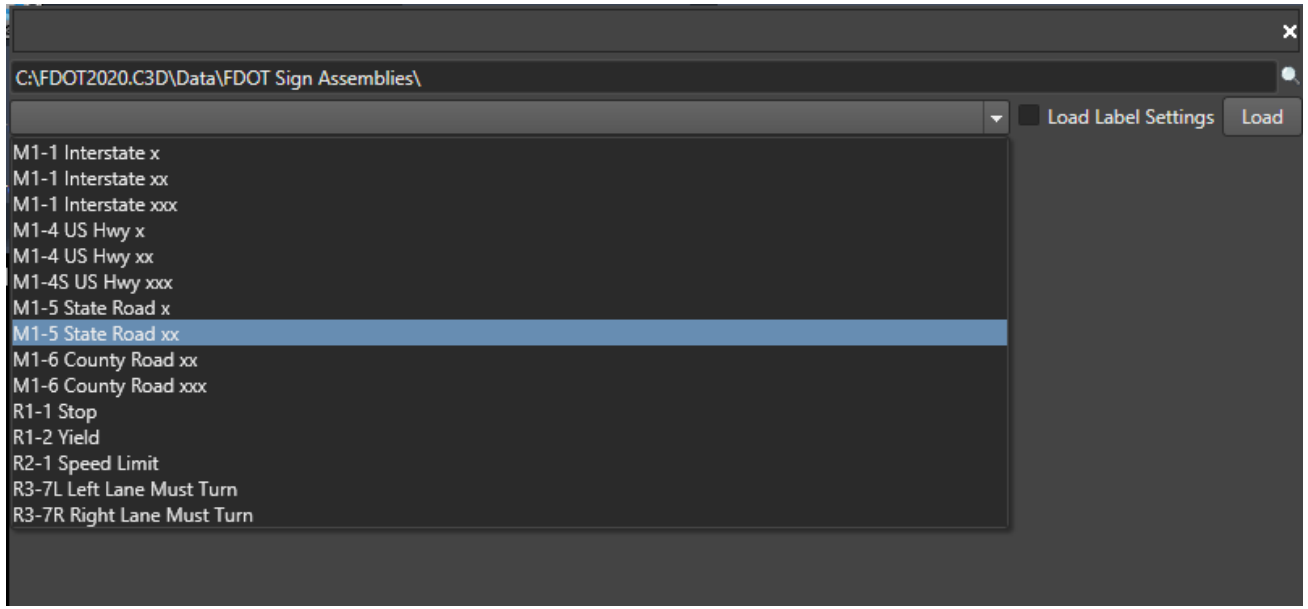




FDOT TRANSPORTATION SYMPOSIUM

FDOT Signs – Delivered Sign Assemblies

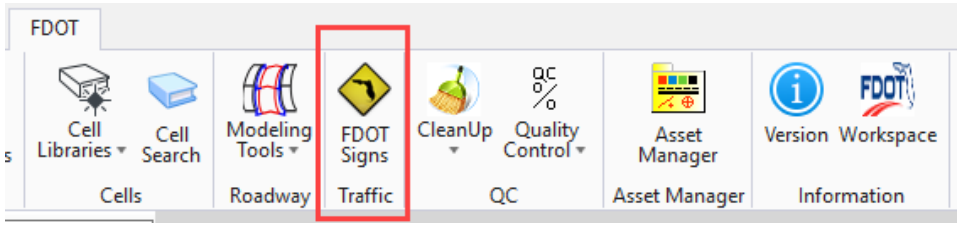
Did you know when the State Kit was installed it also installed some pre built sign assemblies that are ready to go? Located in the data folder within the state kit install there is a FDOT Sign Assemblies folder that contain common signs as shown below. When opened the information populates the form saving you clicks. You can also edit the assembly if needed.



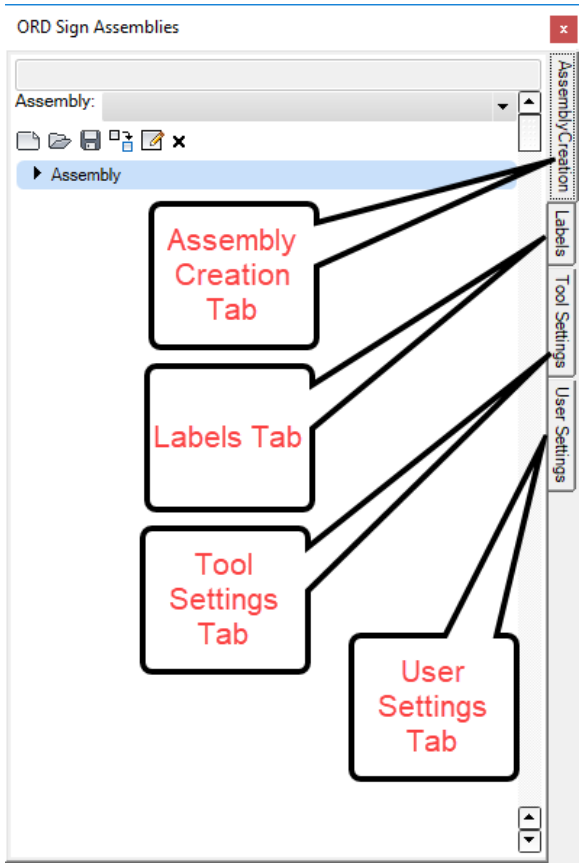
Note: Did you know that the saved xml sign assemblies will also work in the ORD Sign tool? Yes, finally cross platform compatibility!

Part 2
FDOT ORD

ORD FDOT Signs Overview



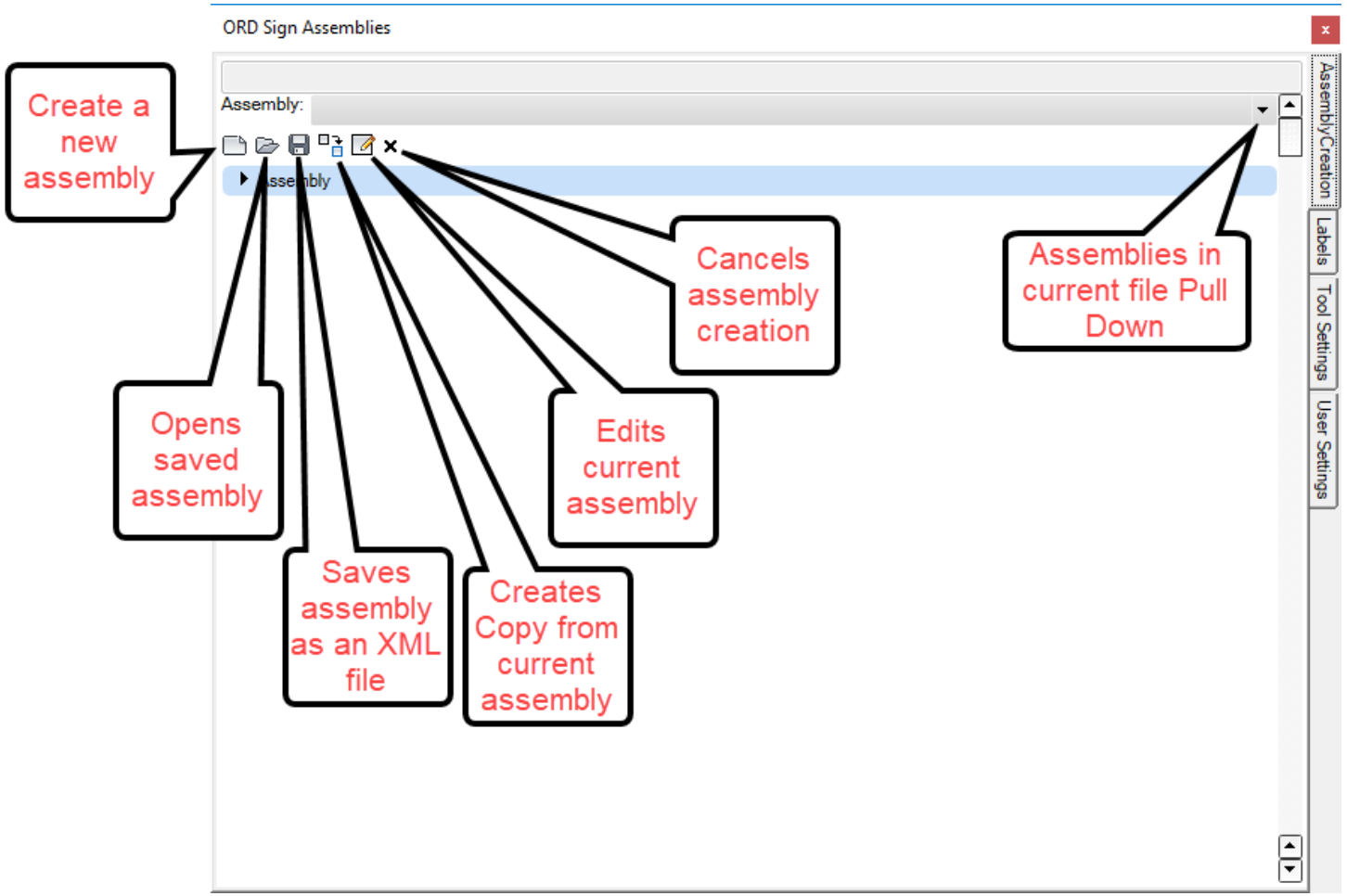
Located on the FDOT Ribbon is the FDOT Signs application



FDOT Signs Dialog Box

ORD FDOT Signs Overview

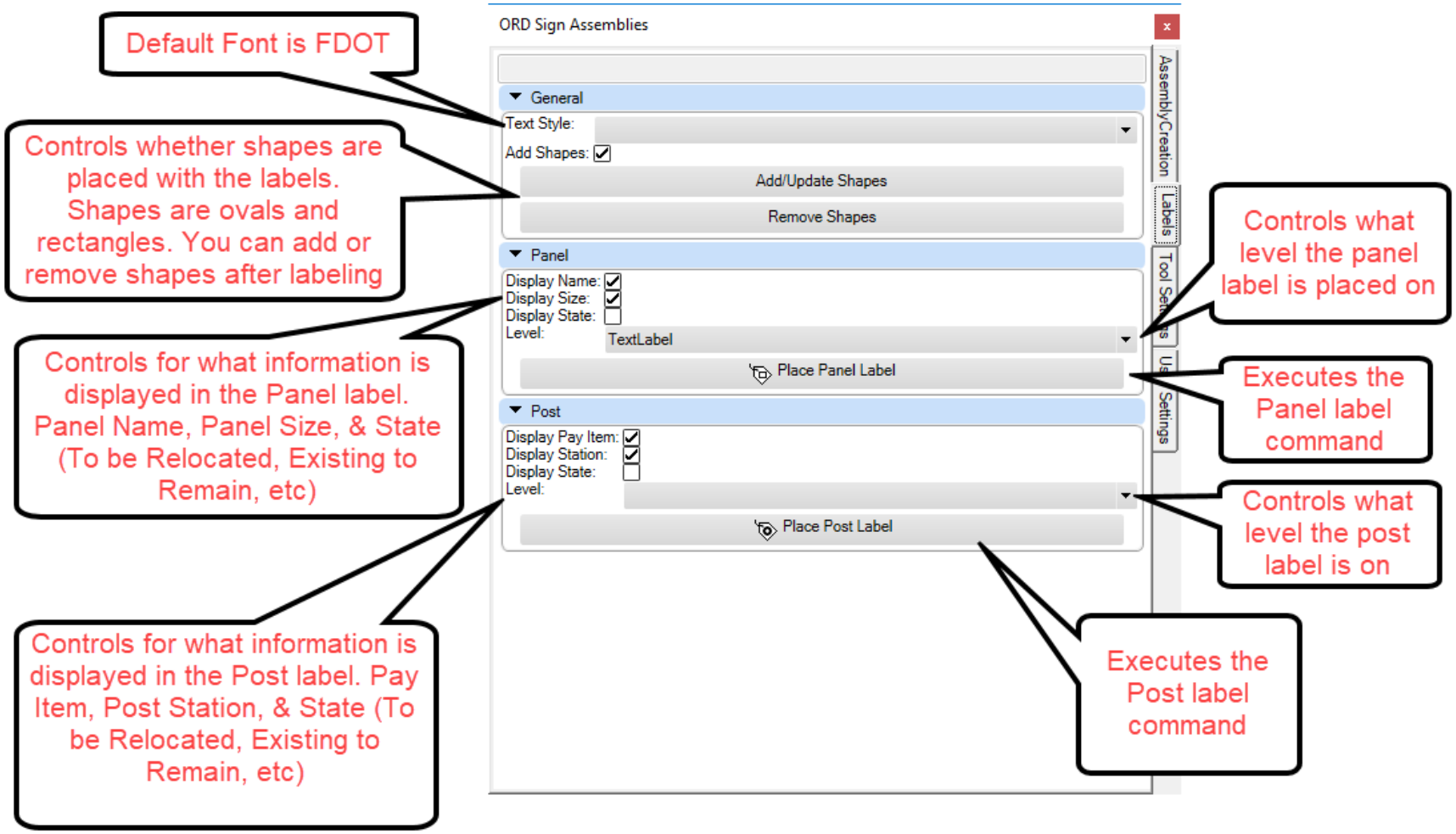
Assembly Creation Tab



This is the default tab and starting point to either building a new assembly or opening a saved assembly.

ORD FDOT Signs Overview

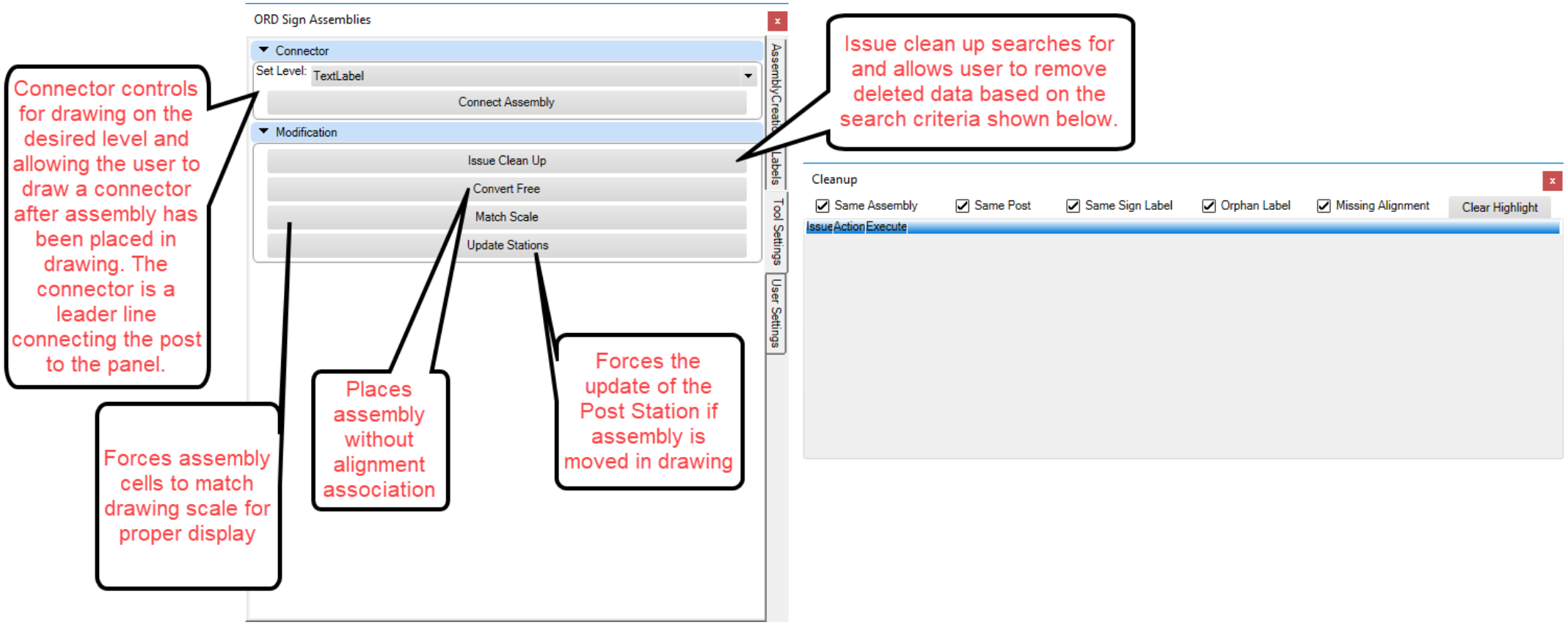
Labels Tab



The Labels tab contains the settings and controls for placing assembly labels.

ORD FDOT Signs Overview

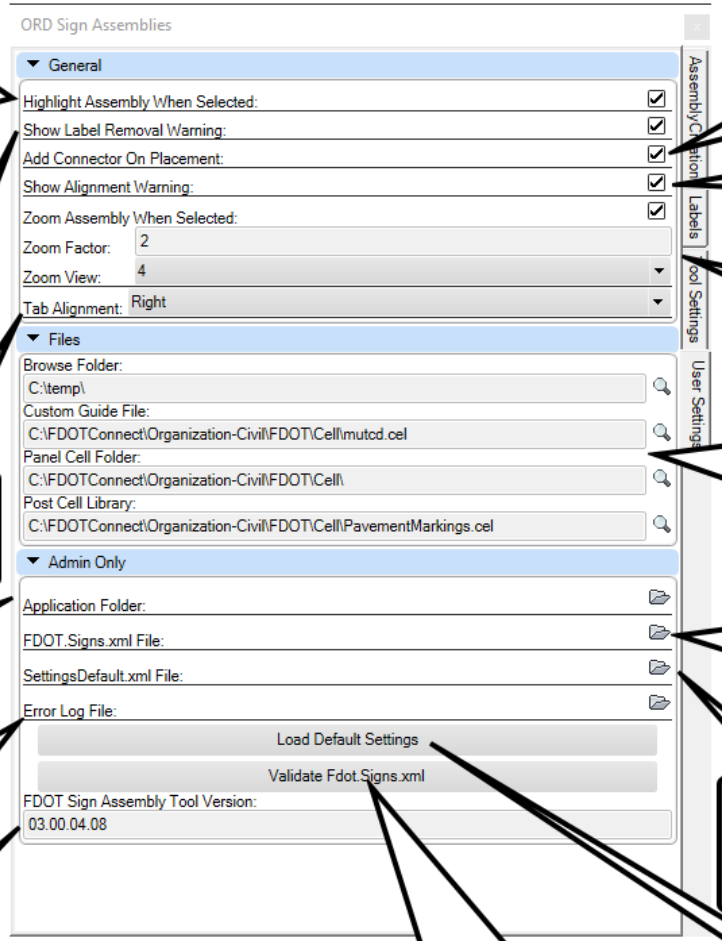
Tool Settings Tab



The Tool Settings tab contains several utilities and controls for working with assemblies.

ORD FDOT Signs Overview

User Settings Tab



When toggled on it allows the user to easily see the assembly highlighted in the drawing when selected from the pulldown list

Controls the automatic placement of the connector when placing the assembly

Informs the user when an alignment has been edited

Informs the user that an already placed label is about to be replaced with a revised label

Allows user to adjust the zoom factor and view

Allows user to change the tab position between top and right

Shows the pathing locations for resources. User can set these from the settings xml file or select the browse icon

Opens the FDOTSigns folder in the ORD build

Opens the FDOT.Signs.xml file for viewing

Opens the error log file to show the user what is causing an error or application crash

Opens the SettingsDefault.xml file for viewing or editing

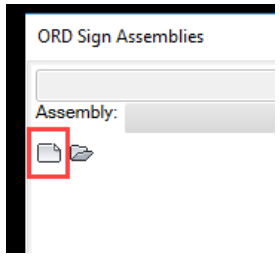
Displays Version information

Validates that all cells are available for use and lists missing cells

Loads the settings from the SettingsDefault.xml file

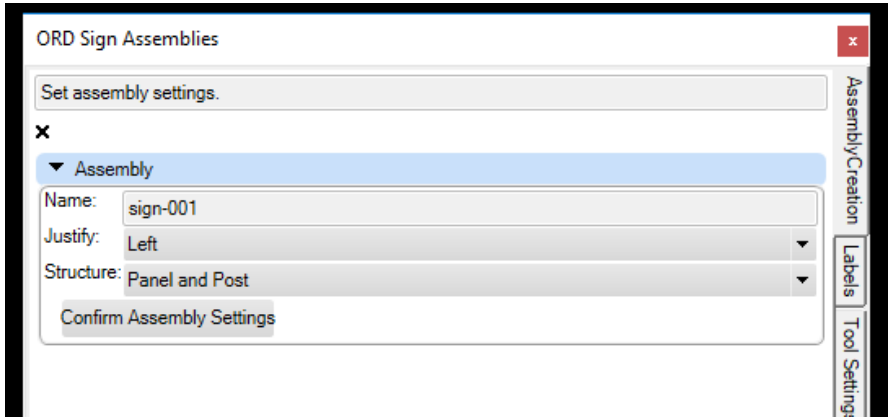
The User Settings tab contains options to control how the application works and pathing for resources.

ORD FDOT Signs Overview



Click on Create New Assembly

Creating a New Assembly

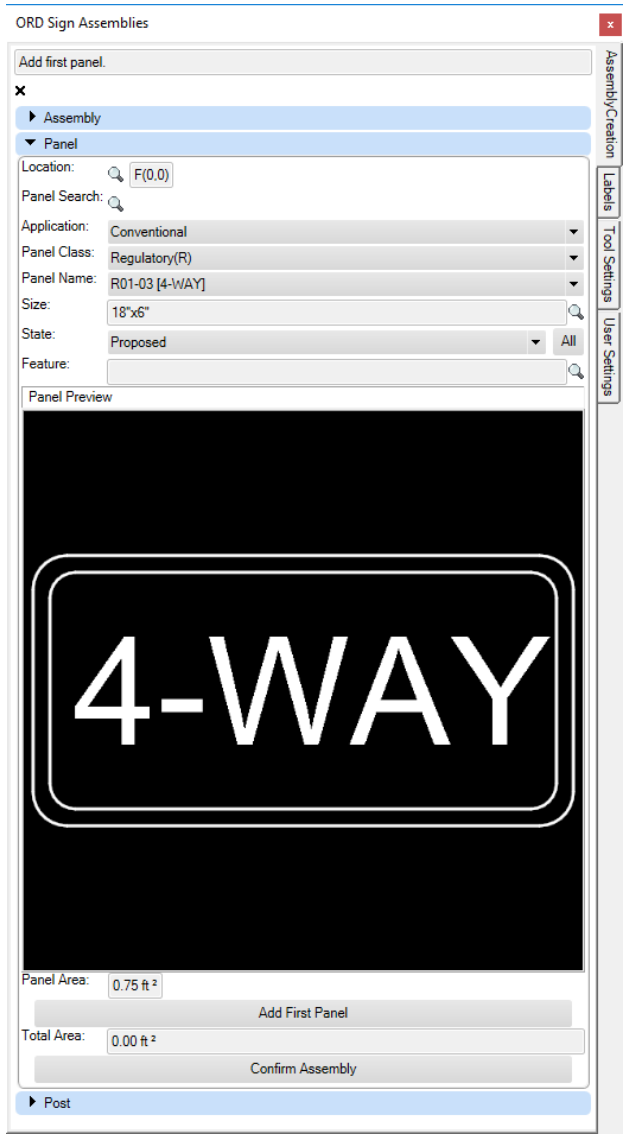


Notice the name has a -001 at the end of every name, this is so the application can keep track of each assembly in the drawing and allows you to have multiple instances of the same name. The counter keeps increasing by 1.

On the Assembly panel;

1. Type in the Assembly Name
2. Select the Justification (Left, Center, or Right)
3. Structure Type (Panel and Post, Panel Only, or Panel and Post Combined
4. With selections made click on Confirm Assembly Settings

ORD FDOT Signs Overview

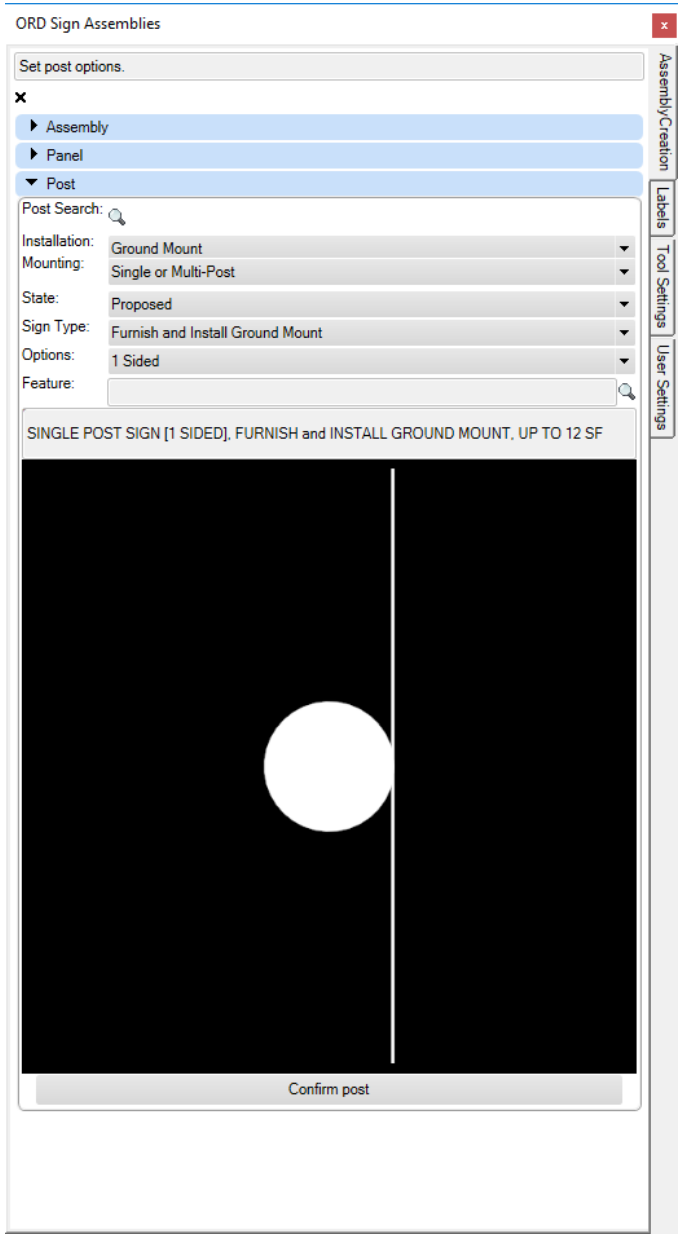


Next is the Panel;

1. Select the Application
2. Select the Panel Class
3. Select the Panel Name, for easier use the panel name is included with the panel number
4. Select the size from already defined sizes by clicking the spyglass
5. Select the desired State
6. With selections made click on Add First Panel
7. Repeat the process if adding additional panels, otherwise select Confirm Assembly

Notice the Panel and Total area to the left, as you add panels the area increases which is how the Assembly gets its pay item assigned.

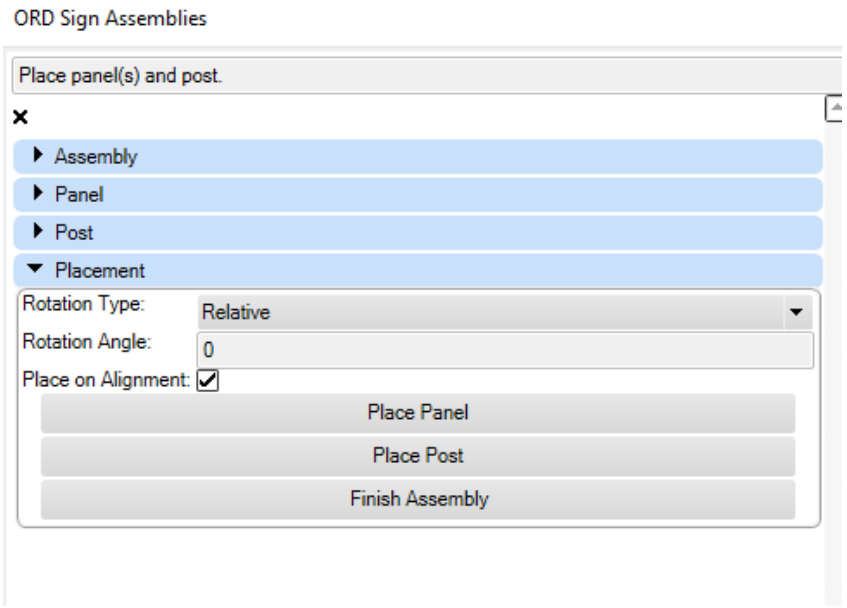
ORD FDOT Signs Overview



Next is the Post;

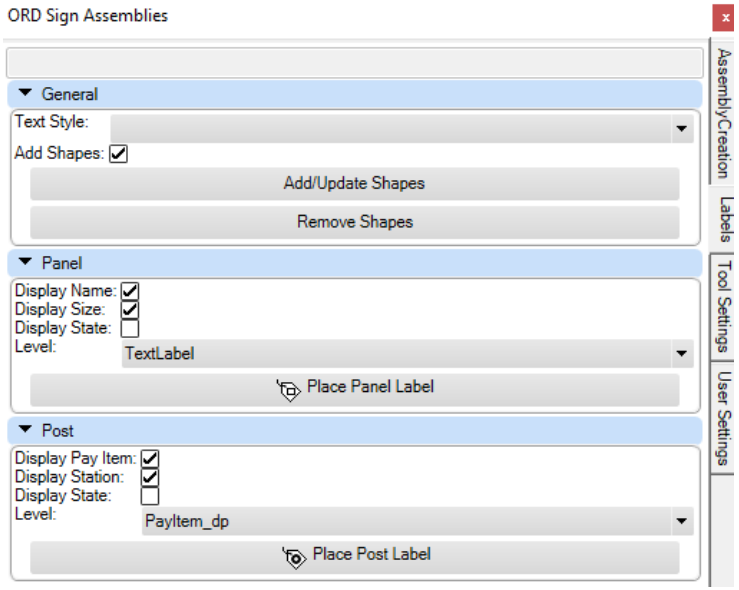
1. Select the Installation
2. Select the Mounting
3. Select the State
4. Select the Sign Type
5. Select the Post Options
6. With selections made click on Confirm Post

ORD FDOT Signs Overview



Next is the Placement;

1. Select your Rotation options (What is shown should be your defaults)
2. Make sure Place on Alignment is toggled to associate assembly to alignment
3. Click Place Panel > Select the Alignment in the Drawing, then left click to place panel
4. Click Place Post > Select Alignment in the Drawing, then left click to place post
5. Click Finish Assembly when satisfied with location
6. From here select the Label tab and
7. With selections made click on Confirm Post



Next is Labeling;

1. Click on the Label Tab
2. Double check your settings and level selections
3. Click on Place Panel Label > Select panel > Left click where you want placement
4. Repeat step 3 if you have additional panels on the same assembly
5. Click on Place Post Label > Select post > Left click for placement under panel label